

## **Dependence of the concentration of half-maximal effect of an open-channel blocker on the agonist concentration**

Skorinkin A., Maleev N., Shaikhutdinova A.

*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

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### **Abstract**

The dependence of the amplitudes of steady-state current responses on the blocker concentration was described by analyzing a kinetic scheme for the blockage of open channels at an arbitrary number of blocker-binding sites. Also described is a variant of this dependence for the case when the blocker can be retained in a channel after its closing. It was shown that the applicability of the Hill equation is limited and it is necessary to take into account the dependence of the concentration of half-maximal effect of the blocker on the agonist concentration. Copyright © 2005 by MAIK "Nauka/ Interperiodica".

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### **Keywords**

Kinetic modeling, Postsynaptic receptor, Steady-state conditions